

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 October 2005 (27.10.2005)

PCT

(10) International Publication Number
WO 2005/099335 A3

(51) International Patent Classification⁷: **C12Q 1/68**,
C12N 9/10, 9/02, 15/12, 15/28

6B, Block 19, Parc Versailles, Tai Po, N.T., Hong Kong
(CN).

(21) International Application Number:
PCT/CN2005/000508

(74) Agent: **INSIGHT INTELLECTUAL PROTERTY
LIMITED**; Suite 501, Zhongyang Building, No. 27A
Zhongguancun Nandajie, Haidian District, Beijing 100081
(CN).

(22) International Filing Date: 15 April 2005 (15.04.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
200410033864.X 15 April 2004 (15.04.2004) CN

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM,
PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW.

(71) Applicant (*for all designated States except US*): **THE
CHINESE UNIVERSITY OF HONG KONG** [CN/CN];
Shatin, N.T., Hong Kong (CN).

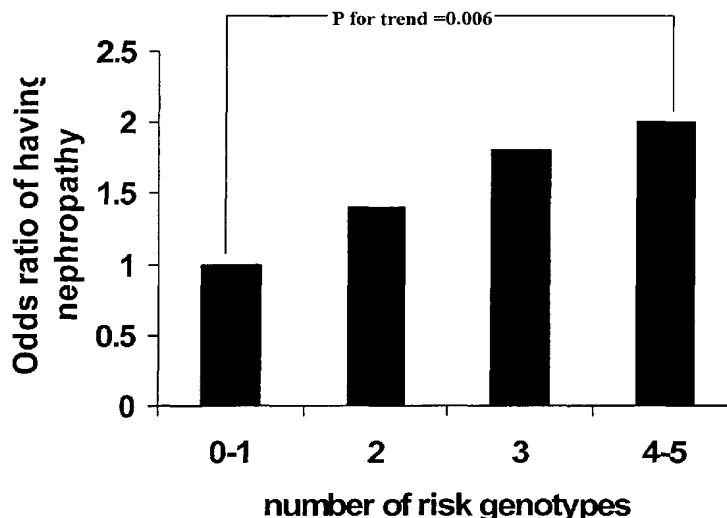
(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **CHAN, Juliana**, CN
[GB/CN]; House 21, 20th Street, Hong Lok Yuen, Tai Po,
N.T., Hong Kong (CN). **NG, Maggie, CY** [CN/US]; Rm
N235, Howard Hughes Medical Institute, The University
of Chicago, 5841 South Maryland Avenue, MC1028,
Chicago, IL 60637 (US). **SO, Wing, Yee** [CN/CN]; Flat

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: METHODS FOR PREDICTING THE RISK OF DIABETIC NEPHROPATHY USING GENETIC MARKERS AND
ARRAYS CONTAINING THE SAME



(57) Abstract: Disclosed is a method for detecting a Chinese diabetic subject suffering from, at risk for developing, or suspected of suffering from a nephropathy. The method includes determining whether a sample from the subject has at least one polymorphic sequence selected from the group consisting of polymorphic sequences an I/D genotype of an ACE gene, an M235T genotype of an AGT gene, a (CA) n-5' (z-2) genotype of an ALR2 gene, an C106T genotype of an ALR2 gene in the promoter region, a G-308A genotype of a TNF- α gene, and a complement thereof, provided that the ALR2 gene cannot be used alone, in which the presence of the polymorphic sequence indicates the subject suffering from, or at risk for suffering from a nephropathy. Also provided is an array for detecting a Chinese diabetic subject suffering from, or at risk for suffering from a nephropathy.

WO 2005/099335 A3



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:
1 December 2005

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.